Universal Magnetic Stand No. 7031 / 7032

Introduction

Read this User's Manual thoroughly before operating the Magnetic Stand. After reading, retain it close at hand for future reference.

Export Control Compliance

The goods, technologies or software described herein may be subject to National or International, or Japanese Export Controls. To export directly or indirectly such matter without due approval from the appropriate authorities may therefore be a breach of export control regulations and the law.

1. Safety Precautions

Caution — Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or property damage.

2. On Various Types of Notes

IMPORTANT

- An important note provides information essential to the completion of a task.
- An important note is a type of precaution, which if neglected could result in a loss of data, decreased accuracy or instrument malfunction/failure.

NOTE

A note emphasizes or supplements important points of the main text.

3. Operating Environment

Caution — If you use a pacemaker, you must not use the Magnetic Stand. The magnetic force on the Magnetic Stand may cause malfunction of your pacemaker.

IMPORTANT

- Use the Magnetic Stand in an environment with a temperature of 0 to 40℃ and a relative humidity of 30 to 70%.
- Avoid sudden changes in temperature. Condensation may negatively affect the performance of the Magnetic Stnad.
- Use the Magnetic Stand in a place with minimal exposure to dust, oil and oil mist.
- Do not bring the Magnetic Stand near the floppy disk or other data storage media. Otherwise the data stored in these media may be deleted due to the magnetic force.
- The attractive force of the Magnetic Stand will be reduced depending on the conditions of a surface the magnetic base attracts, including material, thickness, surface roughness, and painting applied.
- The attractive force will also be reduced if the magnetic base attraction surface has scratches or rust on it.
- Dropping or bumping the magnetic stand will cause a breakage or defective in the Magnetic Stand.
- When fixing the Magnetic Stand on the thick-coated surface, make sure that the Magnetic Stand is securely fixed on the surface to avoid breakage or personal injury by dropping of the Magnetic Stand.
- To prevent deterioration in holding power of magnet, avoid using the fixture in the proximity of transformers or demagnetizer as they generate strong magnetic field, affecting the fixture's performance. Be sure to keep the magnet base lever OFF when not in use.
- Do not disassemble the arm and the magnet base, or its performance can be deteriorated.

4. Features

The Universal Magnetic Stand is a measuring jig for setting dial indicators or dial test indicators and the like in any desired measuring positions.
The Universal Magnetic Stand provides the following features:

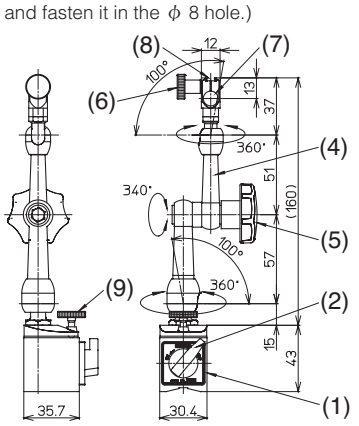
- Employs the magnet base permitting the fixture to be mounted either horizontally, vertically, or even upside down. Also, a V-groove on the bottom of the base permits the fixture to be mounted even on something cylindrical.
- Universal joints permit the arm to be set in any desired posture. The hydraulic locking mechanism permits all the joints to be locked only by a single clamp.
- Fine adjustment mechanism provides an easy zero adjustment of the measuring tools.

5. Name of each part

(1) Magnet base
(2) Lever
(3) Mounting thread *1
(4) Arm body
(5) Clamp knob
(6) Clamping screw
(7) Dial indicator mounting hole *2
(8) Dovetail groove
(9) Fine adjustment knob

UNIT:mm

*1: With No. 7031, the arm cannot be separated from the base.
*2: No. 7031 has a ϕ 8 hole and is supplied with a ϕ 6 bush.
No. 7032 has ϕ 6, ϕ 8, and ϕ 9.53 holes. (When using the ϕ 6 hole, remove screw (6) and fasten it in the ϕ 8 hole.)



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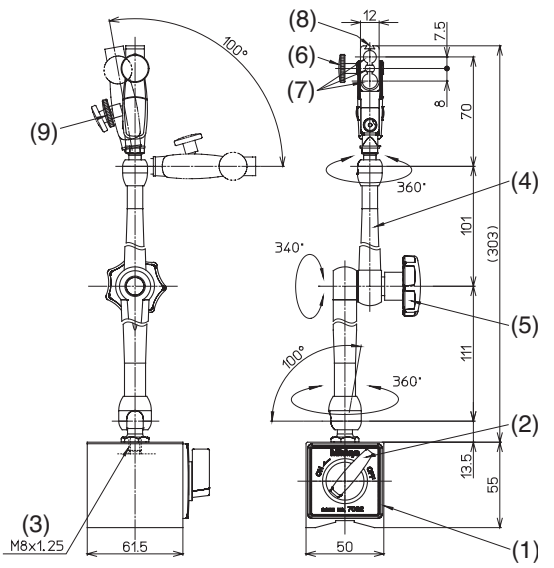

No.7032

6. Usage

1) Set dial indicator in the No. 7 dial indicator mounting hole or a dial test indicator in the No. 8 dovetail groove, then securely tighten it with the clamping screw.
2) Locate the magnetic base in place so that the tip (contact point) of the measuring tool comes into contact with the measured point, then turn the lever ON to have the magnetic base fixed by attraction.
3) Adjust the angle of the arm to locate the contact point of the measuring tool at the measured point, then carefully clamp the clamp knob so that the measuring tool is properly oriented.
4) Use the fine adjustment knob for fine adjustment of the measuring tool orientation and zero point.

IMPORTANT

- Do not apply excessive force to the arm when it has been clamped with the clamp knob because the internal O-ring may break, causing leakage, which might disable the clamping function. Do not attempt to move the arm after it has been clamped with the clamp knob. Loosen the clamp knob a little before moving the arm.
- Be sure to hold the measuring tool in your hand when loosening the clamp knob after the measuring tool has been attached, because the measuring tool might fall and become damaged if it is not held after the clamp knob is loosened.
- To minimize the possible measuring errors, fix the measuring tool in an appropriate orientation, referring to the Users Manual of the measuring tool.
- Only products equivalent to Mitutoyo 1 and 2 series dial indicators with a measurement range of 12.7 mm (.5") or less and dial test indicators can be attached to this Magnetic Stand. If large-scale dial indicators (3 or 4 series products) or long-stroke products are attached to this Magnetic Stand, deflection and other problems might cause the zero point to shift or the indicated value to become unstable.

Mitutoyo

Printed in Japan